DOCUMENT RESUME

ED 061 236 TE 499 778

AUTHOR Marinaccio, Louis
TITLE Potter's Wheel I: Art Education.
INSTITUTION Dade County Public Schools, Miami, Fla.
PUB DATE 71
NOTE 31p.; An Authorized Course of Instruction for the Quinmester Program

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Art Education; *Behavioral Objectives; *Ceramics; Course Content; *Course Objectives; Expectation; *Skill Development; Task Performance
IDENTIFIERS *Quinmester Program

ABSTRACT

A course in forming medium size pottery on the potter's wheel and developing skill to reproduce matching forms is presented. Abilities which will be expected of the student at the end of the course include: (1) defining important terms relating to pottery, (2) identifying and differentiating between certain aspects of ceramic art, and (3) demonstrating proper methods of clay preparation and handling. Course content covers those aspects for which student will be expected to display knowledge at the end of the course. (CK)

ED 061 236

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

AUTHORIZED COURSE OF INSTRUCTION FOR THE QUINMESTER PROGRAM

DADE COUNTY PUBLIC SCHOOLS

POTTER'S WHEEL I

6683.15

Art Education

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY DADE COUNTY PUBLIC SCHOOLS
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

TE 004 778

DIVISION OF INSTRUCTION • 1971

POTTER'S WHEEL I

Art Cft. 1	6683.15
Art Cft. 7	6681.14
Art Cft. 8	6682.14
Ceramic 1	6687.03

Art Education

Written by Louis Marinaccio

for the

DIVISION OF INSTRUCTION
Dade County Public Schools
Miami, Florida
1971

TE 499 778

DADE COUNTY SCHOOL BOARD

Mr. William Lehman, Chairman
Mr. G. Holmes Braddock, Vice-Chairman
Mrs. Ethel Beckham
Mrs. Crutcher Harrison
Mrs. Anna Brenner Meyers
Dr. Ben Sheppard
Mr. William H. Turner

Dr. E. L. Whigham, Superintendent of Schools
Dade County Public Schools
Miami, Florida 33132

Published by the Dade County School Board

POTTER'S WHEEL I

Course enrollment 7-12

Course number:

Art Cft. 1	6683.15
Art Cft. 7	6681.14
Art Cft. 8	6682.14
Ceramic 1	6687.03

Textbooks:

Tart. Carlie, The Beginner and the Wheel

Indianapolis: The American Art Clay Company, 1962

Long, Lois Cuber, Ceramic Decoration

Indianapolis: The American Art Clay Company, 1958

Advanced Training or Vocational Scheme

Pre-vocational

TABLE OF CONTENTS

	Page
METHOD	1
COURSE DESCRIPTION	1
Competencies Expected of the Student upon Completion of the Behavioral Objectives of this Course	2
I. Definition and Background	2
II. Clay Preparation and Handling	2
III. Clay Forming	3
IV. Decorating	3
V. Glazing	4
VI. Firing Ceramic Wares	4
COURSE CONTENT	5
I. Definition and Background	5
A. Historical	5
B. Contemporary	5
II. Clay Handling	5
A. Methods of handling clay	5
B. Equipment and tools	5
III. Clay Forming	6
A. Methods of forming	
O. Equipment and tools	

Page

IV. Decorating 8

A. Methods of decorating

B. Materials for decorating

V. Glazing 10

A. Methods of glazing

B. Equipment and tools

C. Types of glazes

D. Glaze textures

E. Glaze defects

VI. Firing Ceramic Wares 12

A. Preparing ware for firing

B. Procedure for firing kiln

C. Defects due to improper firing

EVALUATION 14

RESOURCES FOR PUPILS 17

SUGGESTED PERIODICALS FOR PUPILS 21

SUGGESTED PLACES TO VISIT 21

BIBLIOGRAPHY 24

METHOD

Forming medium size pottery on potters wheel and reproducing matching forms.

COURSE DESCRIPTION

Learning to form medium size pottery on the potter's wheel and develop skill to reproduce matching forms.

No prerequisite necessary.

Competencies expected of the student upon completion of the behavioral objectives of this course in writing or orally will be to:

I. Definition and Background

°Define the term wheel-thrown ware.

°Define outstanding wheel-thrown ceramics of the past.

°Identify outstanding wheel-thrown contemporary ceramics.

°Differentiate between the outstanding characteristics of the ceramic art of the American Indian and the ceramic art of the Pre-Columbian period.

II. Clay Preparation and Handling

°Demonstrate the proper methods of preparing and handling clay.

°Demonstrate the proper method of wedging, kneading, conditioning, of clay.

°List the equipment used in clay work.

°List the characteristics of clay suited for throwing.

°Demonstrate the proper use and care of the equipment used in clay work.

III. Clay Forming

°Throw simple forms.

°Demonstrate the methods of throwing simple lids, spouts, and rims.

°Demonstrate the welding of handles and spouts.

°Identify wheel-thrown ware.

°Demonstrate the methods of throwing on the potter's wheel.

°Differentiate between throwing a foot and turning a foot.

°Demonstrate the ability to choose those tools best suited for throwing on the potter's wheel.

IV. Decorating

°Demonstrate techniques of decoration that enhance and fit the farm.

°Create ceramics using the various methods of decoration.

°Exhibit a working knowledge of material, form, and surface treatment in clay as created by the following contemporary ceramists: Bernard Teach, Gertrude and Otto Natzler, Marguerite Wildenhain, Sheldon Carey, Robert Turner, Peter Voulkos, and Lyle Perkins.

°Identify basic ceramic materials used in decorating.

V. Glazing

°Demonstrate the application of glaze by the processes of dipping, pouring, brushing, and spraying.

°Identify and define four basic functions of glaze.

°Create a series of test tiles intended for the pre-testing of ceramic glazes.

°Demonstrate the proper use and care of the equipment.

°Demonstrate the proper use and care of tools used in glazing.

VI. Firing Ceramic Wares

°Demonstrate the proper procedure for drying pottery.

°List and identify at least six defects due to improper firing.

°Identify and analyze firing defects due to poor construction of ceramic ware.

°Differentiate between flaws caused by overfiring and underfiring of glaze.

COURSE CONTENT

I. Definition and Background

A. Historical

1. Egyption

2. Ancient Near East

3. Asia: (India, China, Korea, and Japan)

4. Classical: (Crete, Greece, Etrusca, and Rome)

5. Byzantium (Rome)

6. Islam

7. Pre-Columbian

8. Renaissance in Europe

B. Contemporary wheel-thrown ceramic art

1. Aesthetic reaction

2. Craft movement

3. American Indian

II. Clay Preparation and Handling

A. Methods of preparing and handling clay

1. Wedging

2. Kneading

3. Conditioning

4. Storing

B. Selection of clay bodies for throwing.

C. Equipment and tools

1. Wedging boards with cutting wire and canvas.
2. Pug mill (optional)
3. Variable speed potter's wheel--foot pedal operated--with special throwing head set.
4. Large heavy-duty cans and crocks.
5. Plaster bats
6. Natural sponges
7. Flexible rubber

III. Clay Forming

A. Methods of throwing on potter's wheel

1. Standing position
2. Sticking the clay
3. Centering
4. Opening
5. Raising the cylinder
6. Choking
7. Raising the rib
8. Leveling with finger
9. Leveling with sgraffitto tool
10. Trimming
11. Removing finished cylinder
12. Turning
13. Testing for a well thrown cylinder.

B. Throwing medium sized pottery

C. Throwing matching forms

D. Throwing a bowl

C. Throwing a plate

F. Throwing a vase

G. Throwing a foot

H. Throwing and attaching a number of small spouts

I. Throwing a cylinder

J. Pulling a handle

K. Throwing simple rind, lids, and spouts.

L. Turning a bowl

M. Turning a plate

N. Turning a vase

O. Equipment and tools

1. Setstone bat
2. Sheepswool sponge
3. Damp box
4. Polyethylene plastic bags
5. Boxwood modeling tool--6 inch length
6. Boxwood wire modeling tool--8 inches
7. Fettling knife
8. Flexible scraper--2" x 4" half moon
9. Finishing rubber--2 1/8" x 3 1/2"
10. Metal lifters

11. Wooden throwing ribs numbers 1, 2, and 3
12. Elephant ear sponge
13. Metal turning loop tools
14. Sgraffito tool
15. Needle point (lace tool)
16. Clay pull
17. Glaze brushes
18. Bamboo brushes
19. Paring knife
20. Sponge on brush handle

IV. Decorating

A. Methods of decorating

1. Incising
2. Sgraffito
3. Carving
4. Embossing
5. Stamping
6. Texturing
7. Stenciling
8. Wax resist
9. Mishima
10. Satsuma
11. Slip painting
12. Slip trailing
13. Spraying

14. Terra Sigillata

15. Impressing

16. Applique

17. Sprigging

18. Excising

19. Slips and engobes

20. Inlay

21. Underglazes

22. Underglaze crayons

23. Rubber resist

24. Semi-matt

25. Overglazes

26. Matt

B. Materials for decorating

1. Tools

a. Decorating wheel

b. Slip trailers

c. Plastic bags

d. Large round or flat brushes for glaze and slip application

e. Bamboo brushes, large and medium for wax resist and other use

f. Small pointed brushes for detail

g. Flexible scraper, half-moon shape

h. Steel plaster and clay modeling tools for sgraffito, blending, incising, scraping, etc.

i. Elephant ear sponge

j. Professional boxwood tool

k. Steel loop modeling tool

l. Fettling knife

m. Pencils and india ink

n. Plastic water container

2. Consumable materials

a. Slip

B. Plaster of paris

c. Engobes

d. Stencil paper

e. Wax resist

f. Rubber resist

g. Underglaze

h. Overglaze

i. Gloss

j. Semi-matt

k. Matt

V. <u>Glazing</u>

A. Methods of glazing

1. Dipping

2. Pouring

3. Brushing

4. Spraying

B. Equipment and tools

1. Glazing bowl
2. Pitcher
3. Two sticks
4. Mesh metal sieve
5. Metal glaze tong
6. Glaze brushes--soft hair, flat 1/2" to 1"
7. Ceramic spray booth with exhaust fan, stand, and filter
8. Sprayer outfit with gun-compressor
9. 120 mesh sieve

C. Types of glazes

1. Low-temperature glazes
   a. Alkaline glazes
   b. Lead glazes
2. Middle-temperature glazes (Bristol glazes)
3. High-fired glazes
   a. Stoneware glazes
   b. Porcelain glazes

D. Glaze textures

1. Transparent
2. Opaque
3. Gloss
4. Matt

E. Glaze textures

1. Defects due to clay body

a. Pinholes and bubbles

b. Sandpaper surface

c. Blistering

2. Defects due to application

a. Blisters and pinholes

b. Scaly surface

c. Running

d. Chipping

e. Dryness

f. Cracking

g. Bubbles and blisters

3. Defects in glaze composition

a. Shivering

b. Crazing

c. Dull surface on gloss glaze

d. Crawling

e. Pinholes and bubbles

VI. Firing Ceramic Ware

A. Preparing ware for firing

1. Drying

a. Storing (drying cabinet)

b. Bone dry

B. Procedure for firing kiln

1. Familiarizing with kiln manual
2. Applying kiln wash
3. Stacking kiln for bisque firing
4. Stacking kiln for glaze firing
5. Measuring and managing kiln temperature
   a. Cones
   b. Pyrometer
6. Following firing schedule
7. Following cooling schedule
8. Removing ware from kiln

C. Defects due to improper firing

1. Shattering
2. Cracking
3. Warping
4. Blistering
5. Pinholing
6. Glaze crawling
7. Melting
8. Crazing

EVALUATION

It is essential to establish a criteria for evaluating the progress of the student in an art experience. Evaluation in ceramic art cannot be rigid to the extent that it will inhibit creative expression. Creativity is unique and personal.

The product itself cannot be evaluated without taking into consideration the process the student experienced from inception to completion. In addition, evaluation must include evidence of the growth of the individual in relation to his attitude, interest, ability to complete a project, how well he can use his past experience toward problem solving, respect for his own ability and the rights of others.

Evaluation is of vital importance to the student's development. It helps to determine the growth of the student so that the teacher can further motivate and guide the student toward his fullest self-development, creativity and aesthetic growth.

The criteria established for evaluation will vary due to individual differences among students and teachers. Each teacher must determine his own goals and formulate standards for evaluation always keeping in mind that evaluation must be positive as well as constructive.

The following are some suggestions in setting up criteria for evaluation:

1. Has the student learned to evaluate his own pottery as well as that of others with consideration to the sensuous quality of the clay, form, and content?
2. Has the student designed the entire object with an awareness of of space, form, movement, order, relationship of parts to the whole, and good color organization?

3. Has the student expressed his ideas creatively in the medium in an original and meaningful way?
4. Has the student developed a sensitivity to the material?
5. Does the student express his ideas and individuality in clay?
6. Has the student become aware that texture results from an interaction of the clay and the tools?
7. Is the student aware of the difference between tactile and visual textures?
8. Has the student become sensitive to the expressive qualities of the different clay materials and tools?
9. Is the student aware that improper use of material and tools results in poorly constructed forms?
10. Is the student aware that variety can add interest to forms but too much can destroy it?
11. Does the student react empathically to clay in terms of three-dimensional forms?
12. Is the student familiar with good ceramic art of the past and present?
13. Is the student able to identify from contemporary ceramists the ways in which the craftsmen manipulate their tools and materials?
14. Has the student developed good work habits?
15. Has the student's behavior outside the art class improved as a result of his art experience?
16. Has the student developed a respect for his personal ability?

17. Has the student developed a respect for the rights of others?

18. Has the student acquired increased efficiency in handling materials and tools?

19. Has the student developed the ability to carry the project through to completion?

20. Has the student learned the firing process and how to use it to its fullest advantage?

21. Has the student developed good craftsmanship and yet retained the natural qualities of the clay?

22. Has the student learned to form pottery correctly so it does not warp or crack?

23. Is the product suited for the purpose for which it was made?

24. Does it incorporate the principles of good ceramic design?

25. Is the product the one best suited for work in clay?

26. Is the product well constructed?

27. Does the product indicate individuality and expressive quality?

28. Does the glaze fit the form?

29. Has the student improved in attitude, interests, and development of technical skills?

RESOURCES FOR PUPILS

Suggested Texts

Tart, Carlie, The Beginner and the Wheel. Indianapolis: The American Art Clay Company, 1962.

Long, Lois culver, Ceramic Decoration. Indianapolis: The American Art Clay Company, 1958.

Suggested References

General

Ball, F. Carlton and Lovoos, Janice, Making Pottery Without a Wheel. New York: Rheinhold, 1965.

Hofsted, Jolyon, Step-by-Step Ceramics. New York: Golden Press, 1967.

Kenny, John B., Ceramic Sculpture. New York: Greenberg, 1953.

_____, The Complete Book of Pottery Making. Philadelphis: Chilton, 1949.

Nelson, Glenn C., Ceramics, A Potter's Handbook. New York: Holt, Rinehart, Winston, 1960.

Norton, F. H., Ceramics for the Artist Potter. Massachusetts: Addison-Wesley, 1956.

Sanders, Herbert H., Pottery and Ceramic Sculpture. California: Lane, 1964.

Suspensky, Thomas G., Ceramic Art in the School Program. Massachusetts: Davis, 1968.

Prehistoric

Cles-Reden, The Realm of the Great Goddess. New Jersey: Prentice-Hall, 1962

Graziosi, Paolo, Paleolithic Art. New York: McGraw Hill, 1960.

Huyghe, Rene, Larousse Encyclopedia of Prehistoric and Ancient Art. New York: Prometheus Press, 1962.

Leroi, Gourhan Andre, Treasures of Prehistoric Art. New York: Harry N. Abrams, Inc., 1967.

Egyptian

Raphael, Max, Prehistoric Pottery and Civilizations in Egypt. New York: Phantom, Inc., 1947.

Savage, George, Pottery Through the Ages. New York: Pelican, 1954.

Walters, H. B., History of Ancient Pottery. London: Murray, 1905.

Woldering, Irmgard, The Art of Egypt. New York: Greystone, Press, 1963.

Ancient Near East

Childs, V. Gordon, New Light on the Most Ancient East. London: Rontledge and Kegan Paul, Ltd., 1935.

Lloyd, Seton. The Art of the Ancient Near East. New York: Praeger, 1964.

Pope, Arthur [illegible], A Survey of Persian Art. London: Oxford University, 1964.

Wilkinson, Charles K., Iranian Ceramics. New York: Harry N. Abrams, Inc., 1963.

Asia: (India, China, Korea, and Japan)

Auboyer, Jeannie and Goepper, Roger, The Oriental World. New York: McGraw-Hill Book Company, 1967.

Fourcade, Francois, Art Treasures of the Peking Museum. New York: Harry N. Abrams, Inc., 1970.

Lee, Sherman E., A History of Far Eastern Art. New Jersey: Prentice-Hall, Inc., 1964.

Munsterberg, Hugo, Art of the Far East. New York: Harry N. Abrams, Inc., 1968.

Rhodes, Daniel, Tamba Pottery. California: Kodansha International, Ltd., 1970.

Sanders, Hervert H., The World of Japanese Ceramics. California: Kodansha International, Ltd., 1967.

Savage, George, Pottery Through the Ages. New York: Pelican, 1954.

Classical: (Crete, Greece, Etrusca, and Rome)

Arias, P. E., Greek Vase Painting. New York: Harry N. Adrams, Inc., 1961.

Marinatos, S., Crete and Mycenae. New York: Harry N. Abrams, Inc., 1960.

Richter, G. M. A., Attic Red-Figured Vases. New Haven: Yale Press, 1958.

Savage, George, Pottery Through the Ages. New York: Pelican, 1954.

Walters, H. B., History of Ancient Pottery. London: J. Murray, 1905.

Wilson, Robert, Art Concept in Clay. Coral Gables: University of Miami Press, 1957.

Byzantium: (Rome)

Anthony, Edgar W., A History Of Mosaics. Boston: Sargent, 1935.

Grabar, Andre, Byzantium. London: Thames and Hudson, 1966.

Islam

Lane, Arthur, Early Islamic Pottery. London: Faber, 1939.

_____, Later Islamic Pottery. London: Faber, 1957.

Savage, George, Pottery Through the Ages. New York: Pelican, 1954.

Pre-Columbian

Anton, Ferdinand and Dockstader, Frederick J., Pre-Columbian Art and Later Indian Tribal Arts. New York: Harry N. Abrams, Inc., 1968.

Bernal, Ignacio, 3000 Years of Art and Life in Mexico. New York: Harry N. Abrams, Inc., 1968.

Lehmann, Henri, Pre-Columbian Ceramics. New York: Viking, 1962.

Mason, J. Alden, The Ancient Civilizations of Peru. Baltimore: Penguin, 1957.

Westheim, Paul, The Sculpture of Ancient Mexico. New York: Doubleday and Company, Inc., 1963.

Renaissance in Europe

Goldscheider, Ludwig, Michelangelo's Models in Wax and Clay. London: Phaidon, 1962.

Honey, William B. Wedgewood Ware. London: Faber, 1949.

Liverani, Giuseppe, Five Centuries of Italian Majolica. New York: McGraw Hill, 1960.

Charleston, Robert J., World Ceramics. New York: McGraw Hill, 1968.

SUGGESTED PERIODICALS FOR PUPILS

Ceramics Monthly
Box 4548
Columbus, Ohio 43212

Craft Horizons
29 West 53rd Street
New York, N. Y. 10019

School Arts
50 Portland Street
Worcester, Mass. 01608

Design Quarterly
1710 Lyndale Avenue
Minneapolis 3, Minn.

SUGGESTED PLACES TO VISIT

Grove House School of Art
3496 Main Highway
Coconut Grove, Fla. 33133

Sandpiper
2924 Florida Avenue
Coconut Grove, Fla. 33133

Village Corner Gallery
1136 South Dixie Highway
Coral Gables, Florida

Lowe Art Museum
1301 Miller Drive
Coral Gables, Florida

Miami Art Center
7867 North Kendall Drive
Kendall, Florida

SUGGESTED PLACES TO VISIT (cont.)

Ceramic League of Miami
7867 North Kendall Drive
Kendall, Florida

Miami Museum of Modern Art
381 N. E. 20th Street
Miami, Florida

Grove House Gallery
3496 Main Highway
Coconut Grove, Florida

Museum of Science-Planetarium
3280 South Miami Avenue
Miami, Florida

Fairchild Tropical Garden
10901 Old Cutler Road
Coral Gables, Florida

Fantastic Gardens
9550 S.W. 67th Avenue
Miami, Florida

Miami Seaquarium
Rickenbacker Causeway
Virginia Key, Florida

Crandon Park Zoo
Key Biscayne, Florida

Scholastic Art Awards Exhibition
Burdine's Department Store
22 East Flagler Street
Miami, Florida

Miami Studio Shop
2363 West Flagler Street
Miami, Florida

SUGGESTED PLACES TO VISIT (cont.)

Bass Museum of Art
2100 Collins Avenue
Miami Beach, Florida

Japanese Gardens
MacArthur Causeway
Miami, Florida

Vizcaya Art Museum
3251 South Miami Avenue
Miami, Florida

BIBLIOGRAPHY

Ball, F. Carlton and Lovoos, Janice, Making Pottery Without a Wheel. New York: Rheinhold, 1965.

Charleston, Robert J., World Ceramics. New York: McGraw Hill, 1968.

Hofsted, Jolyon, Step-by-Step Ceramics. New York: Golden Press, 1967.

Kenny, John B., Ceramic Design. Philadelphis: Chilton, 1963.

_____, Ceramic Sculpture. New York: Greenberg, 1953.

_____, The Complete Book of Pottery Making. Philadelphia: Chilton, 1949.

Landis, Mildred M., Meaningful Art Education. Peoria: Chas. A. Bennett Co., Inc., 1951.

Leach, Bernard, A Potter's Handbook. Transatlantic Arts, 1951.

_____, A Potter in Japan. London: Faber and Faber, 1960.

Long, Lois Culver, Ceramic Decoration. Indianapolis: American Art Clay Co., 1958.

Nelson, Glenn C., Ceramics, A Potter's Handbook. New York: Holt, Rinehart, Winston, 1960.

Norton, F. H., Ceramics for the Artist Potter. Massachusetts: Addison-Wesley, 1956.

Parmelee, Cullen W., Ceramic Glazes. Chicago: Industrial Publications, 1951.

Rhodes, Daniel, Clay and Glazes for the Potter. Philadelphia: Chilton, 1957.

_____, Stoneware and Porcelain. Philadelphia: Chilton, 1959.

_____, Tamba Pottery. Philadelphia: Chilton, 1959.

BIBLIOGRAPHY (Cont.)

Riegger, Hal, Raku Art And Technique. New York: Van Nostrand Rheinhold Company, 1970.

Sanders, Herbert H., Pottery and Ceramic Sculpture. California: Lane, 1964.

_____, The World of Japanese Ceramics. California: Kodansha International, Ltd., 1967.

Suspensky, Thomas G., Ceramic Art in the School Program. Massachusetts: Davis, 1968.

Tart, Carlie, The Beginner and the Wheel. Indianapolis: The American Art Clay Company, 1962.

Wildenhain, Marguerite, Pottery Form and Expression. New York: Rheinhold, 1959.

Wilson, Robert, Art Concept in Clay. Coral Gables: University of Miami Press, 1957.